State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

M e m o r a n d u m

Flex your power!
Be energy efficient!

To: Southern California Association of Governments
Transportation Conformity Working Group

Date: January 31, 2013

File: 07-LA-071, EA 21060
TIP ID LA0B951

From: ANDREW YOON
Senior Transportation Engineer
Air Quality Branch
Office of Environmental Engineering & Corridor Studies

Subject: *Selection of a Preferred Alternative for the SR-71 Conversion to Freeway with High Occupancy Vehicle (HOV) Lanes Project (LA0B951)*

The purpose of this memorandum is to inform the Southern California Association of Governments' Transportation Conformity Working Group (TCWG) that a preferred alternative has been selected for the SR-71 Conversion to Freeway with High Occupancy Vehicle (HOV) Lanes Project (LA0B951), which has been revised from the scope previously submitted and concurred with by TCWG in September 2012. This Memorandum also requests TCWG to review and concur with the evaluation of the emissions estimate for the preferred alternative.

A Qualitative $PM_{2.5}$ and PM_{10} Hot-Spot Analysis (Analysis) for the subject project was submitted in September 2012 for review by TCWG. The Analysis determined that all the build alternatives were of air quality concern for $PM_{2.5}$ and PM_{10}; and evaluated the effect of all four (4) build alternatives (2, 3, 4, and 4A) whose scope are described below.

Alternative 2 – SR-71 Semi-Depressed with Overcrossing at 9th Street

This Alternative proposes to widen SR-71 to a standard 8-lane freeway including three (3) mixed flow lanes and one (1) HOV lane in each direction from I-10 to SR-60. The freeway alignment will be shifted to west (approximately 28-feet maximum) and the freeway profile will be semi-depressed (approximately 15-feet maximum) from south of Mission Boulevard interchange to Rio Rancho Road so that 9th Street can remain open to traffic as an overcrossing.

Alternative 3 – SR-71 At-Grade with Frontage Road with No Crossings

This Alternative proposes to widen SR-71 to a standard 8-lane freeway including three (3) mixed flow lanes and one (1) HOV lane in each direction from I-10 to SR-60. The freeway profile will be at-grade without any crossing between Mission Boulevard interchange and

Rio Ranch Road. A pedestrian overcrossing near 9th Street and a frontage road on the west side of the freeway between Philips Drive and North Ranch Road are also proposed.

Alternative 4 – SR-71 At-Grade with Frontage Road with Undercrossing at Old Pomona Road

This Alternative proposes to widen SR-71 to a standard 8-lane freeway including three (3) mixed flow lanes and one (1) HOV lane in each direction from I-10 to SR-60. The freeway profile will be at-grade with an overcrossing proposed at Old Pomona Road, which connects to West Lexington Avenue. A pedestrian overcrossing near 9th Street and a frontage road on the west side of the freeway between Philips Drive and Old Pomona Road are also proposed.

Alternative 4A – SR-71 At-Grade with Frontage Road with No Undercrossing at Old Pomona Road

This Alternative proposes to widen SR-71 to a standard 8-lane freeway including three (3) mixed flow lanes and one (1) HOV lane in each direction from I-10 to SR-60. The freeway profile will be at-grade without any crossing between Mission Boulevard interchange and Rio Rancho Road. A pedestrian overcrossing near 9th Street and a frontage road on the west side of the freeway between Philips Drive and Old Pomona Road are also proposed.

The Analysis provided a summary of emissions in which all build alternatives resulted in decrease in direct and re-entrained $PM_{2.5}$ and PM_{10} emissions within the surrounding area when compared to the no-build alternative in their respective years. Based on the evaluation of emissions, the Analysis determined that all the build alternatives would not cause new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards for: 24-hour $PM_{2.5}$ (1997 and 2006 standards); annual $PM_{2.5}$; and 24-hour PM_{10}. TCWG concurred with the determination in the Analysis and deemed the Analysis acceptable for National Environmental Policy Act (NEPA) circulation. Alternative 4 was later identified as the preferred alternative in early December 2012; and the Federal Highway Administration (FHWA) provided a project-level conformity determination at the request by the Department of Transportation, District 7.

On January 8, 2013, however, the City of Pomona Council (Council) approved Alternative 3 with revision, which is now finalized as the preferred alternative for the project. The scope of the revised Alternative 3 approved by the Council is as follows (with the revision struck through in red):

Revised Alternative 3 – SR-71 At-Grade with Frontage Road with No Crossings

This Alternative proposes to widen SR-71 to a standard 8-lane freeway including three (3) mixed flow lanes and one (1) HOV lane in each direction from I-10 to SR-60. The freeway profile will be at-grade without any crossing between Mission Boulevard interchange and Rio Ranch Road. A pedestrian overcrossing near 9th Street ~~and a frontage road on the west side of the freeway between Philips Drive and North Ranch Road are also proposed~~.

The frontage road, which is now removed from the scope for the preferred alternative, was planned to be constructed within the vacant land to the west of the SR-71 along a row of residential receptors. With the removal of this frontage road, emission sources would now be moved farther away from the row of residential receptors than those in the previously proposed Alternatives 3, 4, or 4A with a frontage road.

Changes in emissions along the project corridor as well as within the surrounding area are anticipated to occur as a result of this revision to the scope for Alternative 3; and are summarized below along with the emissions estimate for the previously proposed Alternative 3.

Table 1. Summary of the current and future PM10 and PM2.5 emissions estimate

Emissions in lb/day		Project Corridor				Surrounding Area			
		PM10		PM2.5		PM10		PM2.5	
		Direct	Re-ent	Direct	Re-ent	Direct	Re-ent	Direct	Re-ent
2012	Current	36.9	77.3	24.3	19.3	419.3	1,376.1	266.0	344.0
2029	Alt 1, No-Bld	38.9	83.9	25.1	21.0	465.5	1,706.9	288.4	426.7
	Previous Alt 3	52.3	108.2	30.8	27.1	463.1	1,623.5	279.7	405.9
	Revised Alt 3	52.4	108.6	30.8	27.1	462.7	1,621.0	279.5	405.3
2050	Alt 1, No-Bld	48.4	94.8	30.1	23.7	569.9	1,927.7	339.2	481.9
	Previous Alt 3	62.8	122.2	35.4	30.5	566.6	1,833.5	328.8	458.4
	Revised Alt 3	63.0	122.6	35.5	30.6	568.2	1,830.7	333.4	457.7

Source: Traffic Analysis Final Report by CH2MHill, August 2012
Communication with CH2MHill, January 2013

The summary in Table 1 indicates that, when compared to those for the previous Alternative 3 in 2029, the emissions for the revised Alternative 3 are anticipated to slightly increase for PM_{10} along the project corridor while the emissions within the surrounding area are expected to slightly decrease. The $PM_{2.5}$ emissions along the project corridor in 2029 are anticipated to remain the same. It should be noted that the emissions within the surrounding area for the revised Alternative 3 are also less than those for Alternative 1, No-Build.

Table 1 also indicates that, when compared to those for the previous Alternative 3 in 2050, the emissions for the revised Alternative 3 are anticipated to slightly increase along the project corridor as well as within the surrounding area, with exceptions of re-entrained road dust for $PM_{2.5}$ and PM_{10} in the surrounding area. Emissions for the revised Alternative 3, in the mean time, are all less than those for Alternative 1, No-Build within the surrounding area.

The increase in emissions for the revised Alternative 3, when compared to those for the previous Alternative 3, is relatively small while decrease is anticipated in the re-entrained road dust. With the removal of the frontage road, the revised Alternative 3 proposes to move sources of emissions farther away from the residential receptors. The emissions estimated for the revised Alternative 3 within the surrounding area are all less than those for Alternative 1, No-Build. This estimate is based on the same method and assumptions concurred with by TCWG for the Analysis in September 2012. Based on the evaluation of emissions, it is determined that the revised Alternative 3 would not cause new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards for: 24-hour $PM_{2.5}$ (1997 and 2006 standards), annual $PM_{2.5}$, and 24-hour PM_{10}. It is therefore requested that TCWG provide concurrence with the determination.